

## Biodiversity Record: New Singapore record of the pufferfish, *Lagocephalus spadiceus*

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**Subject:** Half-smooth golden pufferfish, *Lagocephalus spadiceus* (Teleostei: Tetraodontiformes: Tetraodontidae).

**Subject identified by:** Jiayuan Lin.

**Location, date and time:** Singapore Strait, East Coast Park, Bedok Jetty; 19 March 2022; 1817 hrs.

**Habitat:** Marine. Silty seabed at around 3 m depth, with sparse patches of coral rubble.

**Observer:** Jiayuan Lin.

**Observations:** One example of around 12 cm total length (tip of snout to tip of caudal fin) was caught on hook and line baited with tiger prawn (*Penaeus monodon*) meat. The subject was released after photographs (Figs. 1 & 2) were taken. Minutes before its capture, the observer noted that several individuals of the similar looking and congeneric rough golden pufferfish (*Lagocephalus lunaris*) were landed by some fishermen next to him on the jetty.



Fig. 1. Lateral view of the *Lagocephalus spadiceus* immediately after it was landed (Photograph by: Jiayuan Lin).

**Remarks:** This appears to be the first record of *Lagocephalus spadiceus* in Singapore (see Fowler, 1938; Herre, 1940). Its occurrence there was expected as it occurs widely throughout the Indo-west Pacific (Allen et al., 2020). It is possible that specimens were previously misidentified as the morphologically similar rough golden pufferfish (*Lagocephalus lunaris*), which is commonly found in coastal sea and estuaries (Lim & Low, 1998; personal observations). Both species are distinguishable from each other by the shape and extent of the patch of spinules on their backs. In *Lagocephalus*

*lunaris* the spinules are arranged in an elliptical patch that covers the entire anterior dorsal surface to the dorsal fin origin (Ngy et al., 2008). On *Lagocephalus spadiceus*, this patch of spinules is a smaller rhomboidal or elliptical shape that ends above the pectoral fin tips about halfway to the dorsal fin origin (Devi, 2016; Allen et al., 2020; see Fig. 2). This patch could also be of a ‘tadpole-like’ shape with the ‘tail’ reaching the dorsal fin origin (Ngy et al., 2008). From the observations noted herein, it is possible that *Lagocephalus spadiceus* form schools with *Lagocephalus lunaris*, but is present in much smaller numbers.



Fig. 2 Dorsal view of *Lagocephalus spadiceus* showing the spinule patch on the back reaching about halfway to the dorsal fin origin (Photograph by: Jiayuan Lin).

**Literature cited:**

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